

**NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY**

**Hoosier Energy REC - Midway
State Road 245
Lamar, Indiana 47550**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, (326 IAC 2-5.1), 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 147-13579-00001	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 4, 2001

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a peaking power generation source.

Authorized Individual: Paul E. Reynolds
Source Address: State Road 245, Lamar, Indiana 47550
Mailing Address: P.O. Box 908, Bloomington, Indiana 47402-0908
SIC Code: 4911
County Location: Spencer
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Two (2) diesel reciprocating internal combustion engines, identified as emission units DGM-1, DGM-2, and DGM-3, with a maximum heat input capacity of 17.11 MMBtu/hr each and exhausting to stacks M-1A, M-1B, M-2A/M-2B and M-3A/M-3B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (b) Eight (8) diesel reciprocating internal combustion engines, identified as emissions units DGM-4, DGM-5, DGM-6, DGM-7, DGM-8, DGM-9, and DGM-10, with a maximum heat input capacity of 15.73 MMBtu/hr each and exhausting to stacks M-4A/M-4B, M-5A/5B, M-6A/M-6B, M-7A/M-7B, M-8A/M-8B, M-9A/M-9B, M-10A/M-10B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (c) Five (5) fuel oil tanks, identified as units TM1-2C, TM3-4C, TM5-6C, TM7-8C, and TM9-10C, and each with a maximum capacity of 6,000 gallons.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).
- (e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit NO_x and CO is limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Source Modification [326 IAC 2-7-10.5]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.3 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.4 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.5 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.6 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.7 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.8 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan to be submitted to IDEM.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality(OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [326 IAC 2-6.1-5] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2] [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;

- (3) All calibration and maintenance records;
- (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [326 IAC 2-6.1-5]
[IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (a) Two (2) diesel reciprocating internal combustion engines, identified as emission units DGM-1, DGM-2, and DGM-3, with a maximum heat input capacity of 17.11 MMBtu/hr each and exhausting to stacks M-1A, M-1B, M-2A/M-2B and M-3A/M-3B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (b) Eight (8) diesel reciprocating internal combustion engines, identified as emissions units DGM-4, DGM-5, DGM-6, DGM-7, DGM-8, DGM-9, and DGM-10, with a maximum heat input capacity of 15.73 MMBtu/hr each and exhausting to stacks M-4A/M-4B, M-5A/5B, M-6A/M-6B, M-7A/M-7B, M-8A/M-8B, M-9A/M-9B, M-10A/M-10B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (c) Five (5) fuel oil tanks, identified as units TM1-2C, TM3-4C, TM5-6C, TM7-8C, and TM9-10C, and each with a maximum capacity of 6,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total input of diesel fuel to the ten (10) diesel reciprocating internal combustion engines shall be less than 1,128,000 gallons per 12 consecutive month period rolled monthly. This usage limit is required to limit the potential to emit of nitrogen oxides (NO_x) and carbon monoxide (CO) to less than 250 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.2 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records of the monthly use of diesel fuel, in gallons.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

MSOP Quarterly Report

Source Name: Hoosier Energy REC - Midway
Source Address: State Road 245, Lamar, Indiana 47550
Mailing Address: P.O. Box 908, Bloomington, Indiana 47402-0908
Part 70 Permit No.: 147-13579-00001
Facility: Diesel reciprocating internal combustion engines: DGM-1, DGM-2, DGM-3, DGM-4, DGM-5, DGM-6, DGM-7, DGM-8, DGM-9, and DGM-10
Parameter: Fuel usage
Limit: 1,128,000 gallons per 12 consecutive month period, rolled monthly

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Hoosier Energy REC - Midway
Address:	State Road 245
City:	Lamar, Indiana 47550
Phone #:	(812) 876-0370
MSOP #:	147-13579-00001

I hereby certify that **Hoosier Energy - Midway** is

☒ still in operation.

☐ no longer in operation.

I hereby certify that **Hoosier Energy - Midway** is

☒ in compliance with the requirements of MSOP 147-13579-00001.

☐ not in compliance with the requirements of MSOP 147-13579-00000

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ NO. () _____

LOCATION: (CITY AND COUNTY) _____

PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Hoosier Energy REC - Midway
P.O. Box 908
Bloomington, Indiana 47402-0908

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Hoosier Energy REC - Midway, SR 245, Bloomington, Indiana 47402, has constructed the power generator substation in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on _____ and as permitted pursuant to Construction Permit No. 147-13579, Plant ID No. 00001 issued on _____.
5. Additional (?operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)
6. I hereby certify that Hoosier Energy REC - Midway is now subject to the Title V program and will submit a Title V (or FESOP) operating permit application within twelve (12) months from the postmarked submission date of this Affidavit of Construction.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 20 _____.

My Commission expires: _____

Signature

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	Hoosier Energy REC - Midway
Source Location:	SR 245, Lamar, Indiana 47550
County:	Spencer
SIC Code:	4911
Operation Permit No.:	147-13579-00001
Permit Reviewer:	ERG/KH

On March 15, 2001, the Office of Air Quality (OAQ) had a notice published in the Journal Democrat, Rockport, Indiana, stating that Hoosier Energy REC - Midway had applied for a New Construction and Minor Source Operating Permit to construct and operate a peaking power generation source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Responses to Hoosier Energy - Midway's Comments

On April 15, 2001, Hoosier Energy submitted comments on the proposed New Source Construction and Minor Source Operating Permit. The following is a summary of the comments. In the responses, additions to the permit are bolded for emphasis, the language with a line through it has been deleted.

Comment 1: Section C Rule Cites

We believe the following changes should be made to the draft permit: The page title is listed with the section and then the actual draft language. The bolded items are the suggested changes.

Table of Contents

Record Keeping and Reporting Requirements

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] **[326 IAC 2-6.1-5]** [IC 13-14-1-3]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2] **[326 IAC 2-6.1-5]**

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] **[326 IAC 2-6.1-5]**
[IC 13-14-1-13]

The above associated citations throughout the permit should also be changed when referencing these rules.

Response to Comment 1:

The citation that Hoosier Energy would like to add is 326 IAC 2-6.1-5 (Operating Permit Content). This citation directly references the section that states that minor source operating permits shall include monitoring, recordkeeping and reporting requirements to allow IDEM to evaluate compliance. IDEM

feels this is an appropriate citation and has added it to Conditions C.15, C.16, and C.17. Changes to the Table of Contents and Section C of the permit are as follows:

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [326 IAC 2-6.1-5] [IC 13-14-1-3]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2] [326 IAC 2-6.1-5]

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [326 IAC 2-6.1-5]
[IC 13-14-1-13]

Comment 2: IC Engines

The contractor providing the IC engines to Hoosier has notified us that one of the units we had agreed to rent is no longer available and they will replace it with another unit. The original unit, identified as DGM-3, is listed in the facility description as having a maximum heat input capacity of 17.11 MMBTU/hr. The new unit is smaller and will have a maximum heat input capacity of 15.73 MMBTU/hr. Sections A and D should be changed to reflect this change. Also the stack summary in the TSD should be changed to reflect a new flow rate for DGM-3 of 5025 acfm and a new temperature of 940 degrees F.

Response to Comment 2:

Sections A and D will be revised to reflect this change. The decrease in heat input capacity effects the maximum potential to emit, but because the limited potential to emit is based on a source-wide fuel limit that has not changed, the limited potential to emit is not affected by the change in emission units. A revised emission calculation showing the new maximum potential to emit is included on page 1 of the appendix to this addendum. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. As a result, no changes to the TSD will be made. Changes to the permit are as follows:

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) **Two (2)** ~~Three (3)~~ diesel reciprocating internal combustion engines, identified as emission units DGM-1, DGM-2, and DGM-3, with a maximum heat input capacity of 17.11 MMBtu/hr each and exhausting to stacks M-1A, M-1B, M-2A/M-2B and M-3A/M-3B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (b) **Eight (8)** ~~Seven (7)~~ diesel reciprocating internal combustion engines, identified as emissions units DGM-4, DGM-5, DGM-6, DGM-7, DGM-8, DGM-9, and DGM-10, with a maximum heat input capacity of 15.73 MMBtu/hr each and exhausting to stacks M-4A/M-4B, M-5A/5B, M-6A/M-6B, M-7A/M-7B, M-8A/M-8B, M-9A/M-9B, M-10A/M-10B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (a) **Two (2)** ~~Three (3)~~ diesel reciprocating internal combustion engines, identified as emission units DGM-1, DGM-2, and DGM-3, with a maximum heat input capacity of 17.11 MMBtu/hr each and exhausting to stacks M-1A, M-1B, M-2A/M-2B and M-3A/M-3B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (b) **Eight (8)** ~~Eight (8)~~ diesel reciprocating internal combustion engines, identified as emissions units DGM-4, DGM-5, DGM-6, DGM-7, DGM-8, DGM-9, and DGM-10, with a maximum heat input capacity of 15.73 MMBtu/hr each and exhausting to stacks M-4A/M-4B, M-5A/5B, M-6A/M-6B, M-7A/M-7B, M-8A/M-8B, M-9A/M-9B, M-10A/M-10B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (c) Five (5) fuel oil tanks, identified as units TM1-2C, TM3-4C, TM5-6C, TM7-8C, and TM9-10C, and each with a maximum capacity of 6,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 3: Fuel Oil Tanks

The potential throughput for the fuel oil tanks is incorrect. The throughput in the Appendix to the Technical Support Document is based on the throughput submitted with the permit application. This throughput should be based on the fuel limit of 1,128,000 gallons of fuel per 12 consecutive month period. This would give each tank a maximum throughput of 225,600 gallons per year. Based on these new throughputs, the potential to emit VOC should be recalculated for each tank.

Response to Comment 3:

New calculations, showing the increased throughput, are included in the appendix to this addendum. The increased throughput slightly changed the pound per hour VOC potential to emit, but had no effect on the potential to emit in tons per year. As a result, no changes to the permit are necessary.

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Reciprocating Engine (>600 HP)
Corrected

Page 1 of 2 TSD addendum App A

Company Name: Hoosier Energy-Midway Switch Yard
Address City IN Zip: P.O. Box 908, Bloomington, IN 47402-0908
CP#: 13579
Plt ID: 00001
Reviewer: ERG/KH
Date: 04/06/2001

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

S= 0.05 = WEIGHT % SULFUR

160.1

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.05 (1.01S)	3.2 **see below	0.1	0.85
Potential Emission in tons/yr	70.1	40.2	35.4	2243.4	63.1	595.9

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

B. HAP Emissions calculated based on heat input capacity (MMBtu/hr)

Pollutant	Emission Factor (lb/MMBTU)	Emissions (tpy)
Benzene	7.76E-04	0.5440
Toluene	2.81E-04	0.1970
Xylenes	1.93E-04	0.1353
Propylene	2.79E-03	1.9560
Formaldehyde	7.89E-05	0.0553
Acetaldehyde	2.52E-05	0.0177
Acrolein	7.88E-06	0.0055
Naphthalene	1.3E-04	0.0911
Acenaphthylene	9.23E-06	0.0065
Acenaphthene	4.68E-06	0.0033
Fluorene	1.28E-05	0.0090
Phenanthrene	4.08E-05	0.0286
Anthracene	1.23E-06	0.0009
Fluoranthene	4.03E-06	0.0028
Pyrene	3.71E-06	0.0026
Benz(a)anthracene	6.22E-07	0.0004
Chrysene	1.53E-06	0.0011
Benzo(b)fluoranthene	1.11E-06	0.0008
Benzo(k)fluoranthene	2.18E-07	0.0002
Benzo(a)pyrene	2.57E-07	0.0002
Indeno(1,2,3-cd)pyrene	4.14E-07	0.0003
Dibenz(a,h)anthracene	3.46E-07	0.0002
Benzo(g,h,i)perylene	5.56E-07	0.0004
TOTAL		3.0591

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1-3.4-4.

Emission (tons/yr) = [Heat Input Capacity (MMBTU/yr) x Emission Factor (lb/MMBTU) x 8760 hrs/yr] / (2,000 lb/ton)

updated 4/99

Appendix A: Emissions Calculations
VOC emissions from Additive Tanks
Corrected

Page 2 of 2 TSD addendum App A

Company Name: Hoosier Energy-Midway Switch Yard
Address City IN Zip: P.O. Box 908, Bloomington, IN 47402-0908
CP: 13579
Plt ID: 00001
Reviewer: ERG/KH
Date: 04/06/2001

Tank ID	Size (gal)	Content	Potential Throughput (gal/yr)	Potential VOC emissions (lb/yr)*	Potential VOC emissions (tpy)
TM 1-2C	6000	No.2 fuel oil	225,600	7.65	0.004
TM 3-4C	6000	No.2 fuel oil	225,600	7.65	0.004
TM 5-6C	6000	No.2 fuel oil	225,600	7.65	0.004
TM 7-8C	6000	No.2 fuel oil	225,600	7.65	0.004
TM 9-10C	6000	No.2 fuel oil	225,600	7.65	0.004
TOTAL				38.25	0.02

* Potential VOC emissions were calculated using TANKS 4.0

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: Hoosier Energy REC - Midway
Source Location: SR 245, Lamar, Indiana 47550
County: Spencer
SIC Code: 4911
Operation Permit No.: 147-13579-00001
Permit Reviewer: ERG/KH

The Office of Air Quality (OAQ) has reviewed an application from Hoosier Energy REC - Midway relating to the construction and operation of a peaking power generation source. This source will provide additional power at times of high demand. This source is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

New Emission Units and Pollution Control Equipment

The source consists of the following new emission units and pollution control devices:

- (a) Three (3) diesel reciprocating internal combustion engines, identified as emission units DGM-1, DGM-2, and DGM-3, with a maximum heat input capacity of 17.11 MMBtu/hr each and exhausting to stacks M-1A, M-1B, M-2A/M-2B and M-3A/M-3B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (b) Seven (7) diesel reciprocating internal combustion engines, identified as emissions units DGM-4, DGM-5, DGM-6, DGM-7, DGM-8, DGM-9, and DGM-10, with a maximum heat input capacity of 15.73 MMBtu/hr each and exhausting to stacks M-4A/M-4B, M-5A/5B, M-6A/M-6B, M-7A/M-7B, M-8A/M-8B, M-9A/M-9B, M-10A/M-10B, respectively. These units will use diesel fuel only. These engines are not considered emergency generators.
- (c) Five (5) fuel oil tanks, identified as units TM1-2C, TM3-4C, TM5-6C, TM7-8C, and TM9-10C, and each with a maximum capacity of 6,000 gallons.

Permitted Emission Units and Pollution Control Equipment

There are not permitted facilities operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

Stack ID	Emission Unit	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
M-1A	DGM-1	13.33	.833	5241	901NF
M-1B	DGM-1	13.33	.833	5241	901NF
M-2A	DGM-2	13.33	.833	5241	901NF
M-2B	DGM-2	13.33	.833	5241	901NF
M-3A	DGM-3	13.33	.833	5241	901NF
M-3B	DGM-3	13.33	.833	5241	901NF
M-4A	DGM-4	13.33	.833	5025	940NF
M-4B	DGM-4	13.33	.833	5025	940NF
M-5A	DGM-5	13.33	.833	5025	940NF
M-5B	DGM-5	13.33	.833	5025	940NF
M-6A	DGM-6	13.33	.833	5025	940NF
M-6B	DGM-6	13.33	.833	5025	940NF
M-7A	DGM-7	13.33	.833	5025	940NF
M-7B	DGM-7	13.33	.833	5025	940NF
M-8A	DGM-8	13.33	.833	5025	940NF
M-8B	DGM-8	13.33	.833	5025	940NF
M-9A	DGM-9	13.33	.833	5025	940NF
M-9B	DGM-9	13.33	.833	5025	940NF
M-10A	DGM-10	13.33	.833	5025	940NF
M-10B	DGM-10	13.33	.833	5025	940NF

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 7, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations pages 1 through 4.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control

agency."

Pollutant	Potential To Emit (tons/year)
PM	70.7
PM-10	40.5
SO ₂	35.7
VOC	63.6
CO	601.0
NO _x	2262.7

HAP's	Potential To Emit (tons/year)
Single HAP	2.0
TOTAL	3.1

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.
- (c) Until the Permittee applies for a Title V operating permit as outlined in paragraph (b), the Permittee is subject to 326 IAC 2-5.1 and 2-6 and will be issued a New Source Construction and Minor Source Operating Permit.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
10 Diesel Generators	7.8	4.5	3.9	7.0	66.2	249.1	0.3
Fuel tanks	0	0	0	0.02	0	0	0
Total Emissions	7.8	4.5	3.9	7.02	66.2	249.1	0.3

Note: In order to make 326 IAC 2-2 (PSD) not applicable, NO_x was limited to less than 250 tons per year. Limiting the emissions of NO_x indirectly limits the emissions of CO to less than 250 tons per year. Based on this limit, a corresponding limit on the fuel usage was calculated. The total input of fuel to the diesel generators shall be limited to 1,128,000 gallons per 12 consecutive month period.

County Attainment Status

The source is located in Spencer County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Spencer County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Spencer County has been classified as attainment or unclassifiable for all pollutants listed above. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	7.8
PM10	4.5
SO ₂	3.9
VOC	7.02
CO	<250
NO _x	<250
Single HAP	0.2
Combination HAPs	0.3

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.
- (b) The NO_x emissions are limited to less than 250 tons/yr, likewise, limiting CO to less than 250 tons per year, therefore, IAC 326 2-2, PSD requirements do not apply. This limit is equivalent to 1,128,000 gallons of diesel fuel per 12 consecutive month period. (See Appendix A, p.3 for calculations).

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
- (c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable at this source. The provisions of 40 CFR 60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels) are not applicable to the fuel tanks located at this source because each tank has a maximum design capacity less than 75 cubic meters and is therefore exempted from this rule. The provisions of 40 CFR Subpart GG (Standards of Performance for Stationary Gas Turbines) do not apply because this rule applies only to turbines and this source consist of reciprocating engines.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD Minor Limit)

The total input of diesel fuel to the ten (10) diesel generators shall be limited to less than 1,128,000 gallons per 12 consecutive month period. This usage limit is required to limit the potential to emit of NO_x and CO to less than 250 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable.

It was determined that compliance monitoring wasn't necessary for this source. Emissions from pollutants that normally require compliance monitoring (i.e., PM, VOC, and SO₂) are not a concern for this source. The recordkeeping and reporting requirements will be adequate to determine if the source is complying with the fuel limit that limits emissions of NO_x and CO and renders this source a minor source for PSD.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of CO and NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 7-7.1 (Sulfur Dioxide Emissions Limitations)

This source is not subject to the provisions of 326 IAC 7-1.1 because each individual emission unit has a potential to emit SO₂ of less than twenty-five (25) tons per year or ten (10) pounds per hour.

326 IAC 9-1 (Carbon Monoxide Emission Limits)

This source is not subject to the provisions of 326 IAC 9-1-2 because it is not a petroleum refinery, a ferrous metal smelter or a refuse incinerator.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)

This source is not subject to the provisions of 326 IAC 10-1 because it is not located in Clark or Floyd Counties.

Conclusion

The construction and operation of this power generation source shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 147-13579-00001.

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Reciprocating Engine (>600 HP)

Page 1 of 4 TSD App A

Company Name: Hoosier Energy-Midway Switch Yard
Address City IN Zip: P.O. Box 908, Bloomington, IN 47402-0908
CP#: 13579
Plt ID: 00001
Reviewer: ERG/KH
Date: 01/03/2001

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

S= 0.05 = WEIGHT % SULFUR

161.4

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.05 (1.01S)	3.2 **see below	0.1	0.85
Potential Emission in tons/yr	70.7	40.5	35.7	2262.7	63.6	601.0

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

B. HAP Emissions calculated based on heat input capacity (MMBtu/hr)

Pollutant	Emission Factor (lb/MMBTU)	Emissions (tpy)
Benzene	7.76E-04	0.5487
Toluene	2.81E-04	0.1987
Xylenes	1.93E-04	0.1365
Propylene	2.79E-03	1.9728
Formaldehyde	7.89E-05	0.0558
Acetaldehyde	2.52E-05	0.0178
Acrolein	7.88E-06	0.0056
Naphthalene	1.3E-04	0.0919
Acenaphthylene	9.23E-06	0.0065
Acenaphthene	4.68E-06	0.0033
Fluorene	1.28E-05	0.0091
Phenanthrene	4.08E-05	0.0288
Anthracene	1.23E-06	0.0009
Fluoranthene	4.03E-06	0.0028
Pyrene	3.71E-06	0.0026
Benz(a)anthracene	6.22E-07	0.0004
Chrysene	1.53E-06	0.0011
Benzo(b)fluoranthene	1.11E-06	0.0008
Benzo(k)fluoranthene	2.18E-07	0.0002
Benzo(a)pyrene	2.57E-07	0.0002
Indeno(1,2,3-cd)pyrene	4.14E-07	0.0003
Dibenz(a,h)anthracene	3.46E-07	0.0002
Benzo(g,h,i)perylene	5.56E-07	0.0004
TOTAL		3.0855

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1-3.4-4.

Emission (tons/yr) = [Heat Input Capacity (MMBTU/yr) x Emission Factor (lb/MMBTU) x 8760 hrs/yr] / (2,000 lb/ton)

updated 4/99

Appendix A: Emissions Calculations
VOC emissions from Additive Tanks

Page 2 of 4 TSD App A

Company Name: Hoosier Energy-Midway Switch Yard
Address City IN Zip: P.O. Box 908, Bloomington, IN 47402-0908
CP: 13579
Plt ID: 00001
Reviewer: ERG/KH
Date: 01/03/2001

Tank ID	Size (gal)	Content	Potential Throughput (gal/yr)	Potential VOC emissions (lb/yr)*	Potential VOC emissions (tpy)
TM 1-2C	6000	No.2 fuel oil	197,408	7.29	0.004
TM 3-4C	6000	No.2 fuel oil	197,408	7.29	0.004
TM 5-6C	6000	No.2 fuel oil	197,408	7.29	0.004
TM 7-8C	6000	No.2 fuel oil	197,408	7.29	0.004
TM 9-10C	6000	No.2 fuel oil	197,408	7.29	0.004
TOTAL				36.45	0.02

* Potential VOC emissions were calculated using TANKS 4.0

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Calculation of PSD Minor Limit

Page 3 of 4 TSD App A

Company Name: Hoosier Energy-Midway Switch Yard
Address City IN Zip: P.O. Box 908, Bloomington, IN 47402-0908
CP#: 13579
Plt ID: 00001
Reviewer: ERG/KH
Date: 01/03/2001

Emission Limit: 249 tons NOx
Number of Units: 10

Calculate the limit on fuel usage necessary to ensure that NOx emissions are under 250 tons.

Emissions (tpy) = Heat Input (MMBT/hr) * Emission Factor (lb/MMBTU) * 8760 hrs/yr / 2000 lb/ton

Emissions (tpy) = Fuel Usage (gal/hr) * Fuel Heating Value (BTU/gal) * 1E-6 MMBTU/BTU * Emission Factor (lb/MMBTU) * 8760 hrs/yr / 2000 lb/ton

Fuel Usage (gal/hr) = Emissions (tpy) * 2000 lb/ton / (Fuel Heating Value (BTU/gal) * 10E-6 MMBTU/BTU * Emission Factor (lb/MMBTU) * 8760 hrs/yr)

Fuel Usage (gal/hr) = 249 tpy * 2000 / (138,000 * 10E-6 * 3.2 * 8760)

Fuel Usage (gal/hr) = 128.7349

Fuel Usage (gal/yr) = 1127717 93976.45

Total Limited Fuel Usage (Mgal/yr) = 1.13

Total Limited Heat Input (MMBTU/hr) = 17.77

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Reciprocating Engine (>600 HP)
Limited Potential to Emit

Page 4 of 4 TSD App A

Company Name: Hoosier Energy-Midway Switch Yard
Address City IN Zip: P.O. Box 908, Bloomington, IN 47402-0908
CP#: 13579
Plt ID: 00001
Reviewer: ERG/KH
Date: 01/03/2001

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Limited Heat Input Capacity
MM Btu/hr

S= 0.05 = WEIGHT % SULFUR

17.8

Emission Factor in lb/MMBtu	Pollutant					
	PM* 0.1	PM10* 0.0573	SO2 0.05 (1.01S)	NOx 3.2 **see below	VOC 0.1	CO 0.85
Potential Emission in tons/yr	7.8	4.5	3.9	249.1	7.0	66.2

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

B. HAP Emissions calculated based on heat input capacity (MMBtu/hr)

Pollutant	Emission Factor (lb/MMBTU)	Emissions (tpy)
Benzene	7.76E-04	0.0604
Toluene	2.81E-04	0.0219
Xylenes	1.93E-04	0.0150
Propylene	2.79E-03	0.2172
Formaldehyde	7.89E-05	0.0061
Acetaldehyde	2.52E-05	0.0020
Acrolein	7.88E-06	0.0006
Naphthalene	1.3E-04	0.0101
Acenaphthylene	9.23E-06	0.0007
Acenaphthene	4.68E-06	0.0004
Fluorene	1.28E-05	0.0010
Phenanthrene	4.08E-05	0.0032
Anthracene	1.23E-06	0.0001
Fluoranthene	4.03E-06	0.0003
Pyrene	3.71E-06	0.0003
Benz(a)anthracene	6.22E-07	0.0000
Chrysene	1.53E-06	0.0001
Benzo(b)fluoranthene	1.11E-06	0.0001
Benzo(k)fluoranthene	2.18E-07	0.0000
Benzo(a)pyrene	2.57E-07	0.0000
Indeno(1,2,3-cd)pyrene	4.14E-07	0.0000
Dibenz(a,h)anthracene	3.46E-07	0.0000
Benzo(g,h,i)perylene	5.56E-07	0.0000
TOTAL		0.3396

Methodology

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1-3.4-4.

Emission (tons/yr) = [Heat Input Capacity (MMBTU/yr) x Emission Factor (lb/MMBTU) x 8760 hrs/yr] / (2,000 lb/ton)

updated 4/99